

## UNITED STATES DEPARTMENT OF COMMERCE Pat nt and Trademark Office

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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. 09/250,400 02/16/99 YAMASHITA M 35.C13319 **EXAMINER** MMC2/0830 FITZPATRICK CELLA HARPER & SCINTO RAMSEY, K 30 ROCKEFELLER PLAZA **ART UNIT** PAPER NUMBER NEW YORK NY 10112 2879 DATE MAILED: 08/30/00

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

## Office Action Summary

Application No.

Applicant(s) 09/250,400

Examiner

Kenneth J. Ramsey

Group Art Unit

Yamashita et al



	Kenneth J. Ramsey	2879	
X Responsive to communication(s) filed on 5/15/00 (IDS)			
☐ This action is <b>FINAL</b> .			•
☐ Since this application is in condition for allowance except in accordance with the practice under <i>Ex parte Quayle</i> ,	ot for formal matters, prosecutio 1935 C.D. 11; 453 O.G. 213.	n as to the merits	s is closed
A shortened statutory period for response to this action is a is longer, from the mailing date of this communication. Fai application to become abandoned. (35 U.S.C. § 133). Ext 37 CFR 1.136(a).	set to expire3month(		1
Disposition of Claims			
X Claim(s) <u>1-17</u>	is/are p	ending in the app	lication.
Of the above, claim(s)			
Claim(s)	is	/are allowed.	
	is/		
Claim(s)	is/	are objected to.	
Claims	are subject to restriction	on or election requ	uirement
Application Papers  See the attached Notice of Draftsperson's Patent Draft The drawing(s) filed on	jected to by the Examiner.  is approved d  ity under 35 U.S.C. § 119(a)-(d) s of the priority documents have humber)  he International Bureau (PCT Ru	e been	
Attachment(s)  Notice of References Cited, PTO-892  Information Disclosure Statement(s), PTO-1449, Paper Interview Summary, PTO-413  Notice of Draftsperson's Patent Drawing Review, PTO-152  Notice of Informal Patent Application, PTO-152	No(s)		
SEE OFFICE ACTION OF	THE FOLLOWING PAGES		

Art Unit: 2879

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1-5 and 11-17 rejected under 35 U.S.C. 102(e) as being anticipated by Kawade et al, US patent 6,034,478. Column 11, line 32 through column 12, line 41 discloses energization forming in an atmosphere comprising a gas that promotes the cohesion of the electroconductive film while heating the film by resistance. The cohesion promoting gas atmosphere comprises H<sub>2</sub>, CO or methane. The electron-emitting devices so formed are provided as an electron source of an image forming device (figure 8). As to claims 11 and 12 a palladium oxide film is formed by the process disclosed at column 25, lines 1-8. Thus claims 1-5 and 11-17 are anticipated.

Claims 1-5 and 11-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawade et al, Japanese patent application no. Hei 09-298029. Paragraph [0086] through paragraph [0090] of Kawade et al discloses energization forming of a palladium oxide film in an atmosphere comprising a gas that promotes cohesion of the electroconductive film while heating the film by resistance. The cohesion promoting gas comprises H<sub>2</sub>, CO, or methane; see paragraph [0069]. The electron-emitting devices so formed are provided as an electron source of an image forming device (figure 12). Thus claims 1-5 and 11-15 are anticipated.

Application/Control Number: 09/250,400

Art Unit: 2879

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the

manner in which the invention was made.

Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawade et al,

JP patent application no. Hei 09-298029 or US patent 6,034,478, in view of Talko et al EP patent

769,796. To form the palladium oxide film of Kawade et al by the ink jet droplet method of

Talko et al, column 32, lines 30-41, would have been obvious to one of ordinary skill in the art

since accurate placement of the film is possible.

Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawade et al

and Talko et al as applied to claim 9 above, and further in view of Ono et al, hei 08-31311. While

Kawade et al relies upon resistance heating of the oxide film it is also obvious that the film should

be heated between 20 and 400 degrees C since that is the temperature set forth in Ono et al

paragraph [0066] for reducing oxide films in a reducing gas. Use of heating by maintaining the

substrate at 50-100 degrees, claim 8, would have been obvious since this would stabilized the

reduction process.

Any inquiry concerning this communication should be directed to

Kenneth J. Ramsey, (703)308-2324 (voice), (703) 308-7382 (fax).

**KJR** 

August 25, 2000

Kenneth J. Ramsey **Primary Examiner** 

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